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APPLICATION NO.	FILIN	IG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,005	09/27/2000		Matt Andrew Palmgren	109.0002	8086
27997	7590	10/30/2006		EXAMINER	
PRIEST & GOLDSTEIN PLLC				WEISBERGER, RICHARD C	
5015 SOUTHPARK DRIVE SUITE 230 DURHAM, NC 27713-7736				ART UNIT	PAPER NUMBER
				3693	-

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Occurred	09/671,005	PALMGREN ET AL.					
Office Action Summary	Examiner	Art Unit					
	Richard C Weisberger	3624					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  (6(a). In no event, however, may a reply be tim  ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 24 Fe	hruary 2005						
· _ · · · · · · · · · · · · · · · · · ·	action is non-final.						
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closed in accordance with the practice under E	•						
Disposition of Claims							
4) Claim(s) 1-39 is/are pending in the application.							
4a) Of the above claim(s) <u>12-29 and 39</u> is/are withdrawn from consideration.							
5)⊠ Claim(s) 8-9 and 36-37 is/are allowed.							
6)⊠ Claim(s) <u>0-9 and 30-37</u> is/are allowed. 6)⊠ Claim(s) <u>1-7,10,11,30-35 and 38</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8)⊠ Claim(s) <u>1-39</u> are subjected to: 8)⊠ Claim(s) <u>1-39</u> are subject to restriction and/or election requirement.							
Application Papers							
<u> </u>							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form PTO-132.					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>							
·	•	ed in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
See the attached detailed Office action for a list (	or the certified copies flot receive	u.					
Attachment(s)	Λ □ 12422 1 · Λ · · · ·	/DTO 442\					
1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  A) Interview Summary (PTO-413)  Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	atent Application (PTO-152)					
Paper No(s)/Mail Date	6)						

# **DETAILED ACTION**

#### Election/Restrictions

The traversal is on the ground(s) that (1) the search for the claims of group II would impose no serious additional burden to the search required for group I, (2) Group I and II are not mutually exclusive, and (3) groups I and II are directed to the same US Patent classification. These arguments are not persuasive. Arguments (1) and (3) assume that primary search for the claimed invention is within the US Patent database. The subject matter of the invention is scantly represented within the database. Accordingly, the major search for the subject matter is within the universe of non-patent literature, namely academic journals. As for argument (3), claims 12 and 17 recite limitations not common to claim 1, and claim 1 recites limitations not found in claim 12 and 17. For example, claim 12, determines a set of mortgage origination data to be analyzed and incorporates a proportional hazards model and a hat function model to compute the indicator of risk for said data. Claim 1 analyzes mortgage loan data with a proportional hazards model to take into consideration not only occurrence of an event relevant to the loan, but also the time to the event. Moreover, the output of claim 1 and 12 and claim 17 appear to be different. In claim 1 the output is a default probability, while in claim 12 the output is a mortgage report (see, claim 13). Alternatively, Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants and if it is at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as generating a set of probabilities, while the invention of group II has separate utility such as generating mortgage reports. See MPEP § 806.05(d).

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This application contains claims 12-29 and 39 are drawn to an invention nonelected with traverse in Paper dated Feb. 24 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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## Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 11, and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Deng, Mortgage Termination: An Empirical Hazard Model with Stochastic Term Structure.

The reference teaches a method and system of receiving mortgage loan for an applicant for a loan, said data including data regarding occurrence of an event relevant to the loan and also time to the event; (see, page 1, appendix and table 2). In addition, the reference teaches of analyzing the received data utilizing a proportional hazards model. (See, page 1, appendix and table 2) The reference also teaches the limitations of claims 2,3,5,6, and 7. (See, page 1, appendix and table 2.)

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 10 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deng, Mortgage Termination: An Empirical Hazard Model with Stochastic Term Structure.

The reference teaches of receiving mortgage loan for an applicant for a loan, said data including data regarding occurrence of an event relevant to the loan and also time to the event; (see, page 1, appendix and table 2). In addition, the reference teaches of analyzing the received data utilizing a proportional hazards model. (See, page 1, appendix and table 2) The reference also teaches the limitations of claims 2,3,5,6, and 7. (See, page 1, appendix and table 2.)

The reference fails to teach the method and system for transmitting a report to a potential loan originator which includes the computed probability of default transmitting a report to a potential loan originator.

The examiner takes official notice that the scientific method comprises the following steps:

- 1. Observe some aspect of the universe.
- 2. Invent a tentative explanation, called a hypothesis, that is consistent with what you have observed.
- 3. Use the hypothesis to make predictions.

With this in mind, it would have been obvious for one skilled in the art at the time to have used the proportional hazards model hypothesis of the primary and secondary references to make predications of the risk of default of future loans (i.e. applying the model to loan applications). Further, it would have been obvious for one skilled in the art to have offered this model to a loan originator or in the alternative to have transmitted the report to a loan originator. The motivation being to reduce the risk of loss to the originator. The risk of loss is an art recognized variable in the art to loan issuance.

Claims 8-9 and 36-37 are allowable over the prior art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard C Weisberger whose telephone number is 571 272 6753. The examiner can

normally be reached during the hours of Maxiflex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vince Millin can be reached on 571 272 6747. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Richard C Weisberger Primary Examiner Art Unit 3624